Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

On the Microscopic Observation of Minute Objects.—Prof. **Frazer** remarked, that he desired simply to put on record a thought relating to Helmholtz's now famous establishment of the limit of vision through the microscope. As this limit was determined by half the length of a wave of light and since the wave-lengths of the most refrangible rays of the light spectrum (*i. e.* the violet) are somewhere near the 1-57000th part of an inch, the conclusion was reached that nothing more minute than the 1-114000th part of an inch could be seen. But actinic waves or others of smaller length (of greater refrangibility too) in passing through a substance on which are lines or other markings less than 1-114000th inch apart, may be altered to light waves, and become visible, provided, that the substance through which they pass is capable of fluorescing, *i. e.*, increasing their wave length, and provided the distance apart of the marks to be seen is not less than one-half the wave length of such actinic waves.

The meeting having adjourned until May 16, the following were then elected members of the Council:—

For three years—Edw. S. Whelen, R. S. Kenderdine, M.D., J. H. Redfield, J. G. Hunt, M.D.

For two years—Geo. H. Horn, M.D., Jos. Wharton, Jos. Jeanes, Geo. A. Kœnig.

For one year—Geo. Vaux, J. S. Haines, W. H. Dougherty, Harrison Allen, M.D.

May 16.

The President, Dr. **Ruschenberger**, in the chair.

Thirty-four members present.

The "Sleep of Plants" as an Agent in Self-Fertilization.—Mr. **Thomas Meehan** said that what is popularly known as the "sleep of plants," the closing of some kinds of flowers at nightfall, though a matter within common observation, had not, so far as he was aware, been made a subject of physiological investigation, with the view of ascertaining the value, if any, of this kind of motion in the economy of plant life. He had recently discovered that by means of this peculiar motion the common Claytonia Virginica and some butter-cups were fertilized by their own pollen. The fertilization of these plants had been somewhat of a mystery to him, as, in view of some prevailing theories of cross-fertilization by insect agency, these plants ought not to be self-fertilizers; but from repeated observation he was satisfied that no insects had visited plants that had yet seeded abundantly. Watching the process of fertilization in Claytonia, he found the stamens on